OUT 71568

SECRET

Ø 132218Z JAN 71
FM NPIC WASHDC
TO RHCOAAA/SAC OFFUTT AFB OMAHA NEBR
RHCOAAA/544TH ARTW OFFUTT AFB OMAHA NEB
RUCILBA/100TH SRW OL 19 MCCOY AFB FLA
RUVRRIA/DIR MAT MGT/MMW ROBBINS AFB, GA
RUWMODA/100TH SRW DAVIS MONTHAN AFB ARIZ
RUWMODA/12 SAD DAVIS MONTHAN AFB ARIZ
RUEBJRA/NAVRECONTECHSUPPCEN SUITLAND MD
RUEAIIA/CIA WASH DC
RUEKJCS/DIA
RUWBKNA/15TH AF MARCH AFB RIVERSIDE CALIF
RUEFHQA/HQS USAF
BT

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S E C R E T CITE NPIC Ø171
SAC FOR DIRI, DOSR, DISD, DM4C; 100 SRW DAVIS MONTHAN AFB
FOR DO, DCOI, DCM, AEMS; 12 SAD FOR MD; DIA FOR DC5C;
HQ USAF FOR AFIGOS, AFXOTR; 15TH AF FOR DI, DO, DM4C.
SUBJ: OLD HEAD EVALUATION, MSN G-173A

1. IMAGE QUALITY: MOST IMAGERY IS GOOD AND MAINTAINS EDGE SHARPNESS AT 25X; HOWEVER, EACH AFT FR DISPLAYS AN AREA OF DOUBLE IMAGERY AND SEVERE IMAGE SMEAR. THIS AREA IS APPROX FOUR INCHES WIDE, LOCATED APPROX FOUR INCHES FROM THE END OF EACH FR, AND AFFECTS THE ENTIRE WIDTH OF THE FORMAT. INTERPRETATION SUITABILITY IS GENERALLY GOOD. CLOUDS OBSCURE LESS THAN 20 PCT OF THE ENTIRE MSN.

2. MSN DATA:
   A. MSN: G-173A; DATE: 8 JAN 71
   B. CAM: IRIS II; UNIT: 8006
   C. A/C: 340
   D. CAM MODE: STEREO
   E. VEHICLE T/O: 1200Z; CAM/ON: 1409Z
   F. FILM: 3414
   G. CHEMISTRY: MX819-1; PROCESS FAC: NRTSC
   H. AVG GAMMA ORIG NEG: 1.99
   I. EXPOSURE SLIT: Ø.060 IN.
   J. FILTER: W-23A

3. ORIG NEG:
   A. EXPOSURE: DENSITOMETRIC ANALYSIS OF THIS MSN INDICATES AN UNDEREXPOSURE OF ONE STOP AT THE BEGINNING AND APPROX ONE HALF STOP UNDEREXPOSURE AT MIDDAY (SEE REMARKS, PARA 5.).
   B. DENSITY: GENERALLY THIN; CONTRAST: GOOD.
   C. IMAGED DEGRADATIONS: NONE OTHER THAN THOSE CHARACTERISTIC OF THE SYSTEM.
   D. PHYSICAL DEGRADATIONS: NONE NOTED.
   E. DATA RECORD EQUIP: FUNCTIONED PROPERLY THROUGHOUT.
   F. OTHER: MANY INSTANCES OF INSUFFICIENT OVERLAP AND SOME INSTANCES OF NO OVERLAP (HOLIDAYS) BETWEEN SUCCESSIVE FWD AND SUCCESSIVE AFT FRS WERE NOTED. CAMERA CYCLE TIME REMAINED CONSTANT AT 9.5 SEC AND V/H METER REMAINED CONSTANT AT 8.Ø THROUGHOUT. LAST TITLED FR: 1399; COUNTER: 1404, BIAS CONSTANT THROUGHOUT.

4. POSITIVES: GOOD FOR INTERPRETATION.

5. REMARKS: A. DENSITOMETRIC ANALYSIS INDICATES 3414 FILM ON THE LAST THREE OLD HEAD MSNS IS UNDEREXPOSED. THE ALTERNATIVES AVAILABLE TO CORRECT THIS EXPOSURE PROBLEM ARE: (1) ADJUST SLIT WIDTH, AND/OR (2) USE A WRATTEN 12 FILTER.
   B. NPIC SUGGESTS A W-12 FILTER BE EMPLOYED ON AN

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OPERATIONAL MSN USING THE SAME EXPOSURE AS WAS USED ON MSN G-173A, I.E., A Ø.Ø6Ø SLIT, WITH CAM/ON AT APPROX 27 DEGREES SOLAR ELEVATION. FURTHER EXPOSURE SUGGESTIONS WILL PROBABLY RESULT FROM THE EVALUATION OF SUCH A MSN.

C. IF A W-23A FILTER IS TO BE USED, NPIC SUGGEST A ONE-HALF STOP INCREASE IN EXPOSURE, I.E., A MSN WITH CAM/ON AT 27 DEGREES SOLAR ELEVATION SHOULD USE A Ø.Ø9Ø SLIT WIDTH.

D. NPIC FURTHER SUGGEST THAT A SOLAR ELEVATION OF 25 DEGREES BE THE MINIMUM USED WITH 3414/W-23A COMBINATION. MINIMUM SOLAR ELEVATION RECOMMENDATION FOR W-12 WOULD BE PART OF EVALUATION SUGGESTED IN PARA B.

S E C R E T EOM GROUP ONE

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